Hey, so first of all for everybody in the room and everybody on phones and all different ways for everyone to communicate overs DCS thanks for taking the time to participate and to kind of share ideas. I just want to take a few minutes to give a couple of comments. I could filibuster and take the next two hours of your time and just talk, but Dan Shrimpton's already warned me not to do that and has prohibited me from staying past 11:55 so you can get the work done that he wants to get done. But I do want to take some questions and take your thoughts so I'm going to limit my comments and I'll take your questions and elaborate in more detail in some of the questions.

But first, the health of the functional area is very good. So overall, we are very healthy and I look at that in a couple of different dimensions. So one of the dimensions is in promotion rates, so that is going very well. The last COL's board we had a lower than expected promotion rate and that was really attributable to a couple of folks who should have gotten promoted who retired so we didn't get them and one or two who we thought should have gotten promoted and didn't and had those fallen our way then we would have been right up at the top of the Army's promotion rates. But promotion rates are high, I'm not worried about them and I think that's an indication of the value added to the organization. So that's one way that I judge it. The second way I judge it is the demand and there is an insatiable demand for you all. The talent you bring, the skill sets you bring and what we are doing people are asking me for more and more and more ORSAs. From NETCOM to Cyber to operational units, we continue to grow our footprint and so that is a good sign that the people that you all work for and the people we all support, value you and they are willing to dedicate what in many situations is resources, their billets, to get more ORSAs. I'll tell you for the COL's assignments, which I personally work all 80 COL's – we are oversubscribed. More people want ORSA COL's than we can actually cover and the reason we're having trouble is that we did lose two LTC's we had been banking one to become COL's who retired so now we're just one or two short going forward, but, it's not like I sit around and worry where I'm going to assign people, it's how I'm going to distribute the talent and the same thing for the lower ranks and that we have more requests for ORSA than we have people and we've got to manage that shortage and that's a good position to be in. The third area where I think we are healthy and why I am optimistic is our willingness to change. We are moving out and growing our skill set in the data science field. That to me is a sign of a healthy organization, where you can see a need and see how your skills sets adapt to it and then throw yourself into it and solving problems. And the problems we're solving with data science are, to me, right in line with the core function when people say, when I get approached by folks like GEN Thomas at SOCOM, GEN Votel at CENTCOM, what are ORSAs doing, what do you think they do, I say they help people make decisions. That's what we do as a career field. We help people make decisions, we have a tool box, we use math, we use decision sciences, we use all sorts of things, now it's going to be data sciences but in the end we help people make decisions. And they're like – hey sounds good – let's go get a couple of them. The data science area is growing and the challenge it presents, that in the old days, when Ferrari was a young ORSA, you could go and get a college degree and for the next 20 years of your career you could ride that degree and say hey – I've got this degree – look how smart I am – I've got these skills – and things really didn't change - you ran stuff in excel. This new data science field and all of decision support stuff is changing incredibly fast. The days of riding for a long time on your education and your toolkit are gone. And so we, have too, as an organization, adapt to keep people's skills fresh. In some ways, it's not education, there's got to be a base of education, but in a lot of these tool sets it's training and there's a difference between education and training. You'll have a baseline education, but we're going to go out there and continually train ourselves on the newest tools that are out there, R, Python, whatever's out there next, all this stuff is

going to be changing so fast and we can't become wedded to any one tool and we have to take these tools and apply them operationally. There are a lot of people who now are talking data science and all that stuff, but very few other than our ORSAs are actually out there doing it. So whether it's Matt Benigni at JSOC; whether it's CAA doing threat financing, identifying 10 million dollars of illicit games; whether it's going to Jordan to conduct a training exercise - all of these things are the heart of our future, not exclusive of our future. We will not walk away, nor can we, from our basic functions. We will always be in Divisions and Corps - the most important assignments we have - the most important ORSAs in the United States Army are those MAJs and LTCs in those Divisions and Corps. Bar none and if we ever forget about that we will, as a career field, vanish from the face of earth - because it's those Corps Commanders, those Division Commanders, those Brigade Commanders who are with Soldiers every day. Right now they all tell me - my Division ORSA was AWESOME - where is she, what am I going to do with her, where am I going find somebody like her - and that's why I rely on the COLs to put our best into those jobs. I don't have the time or the depth and knowledge to get below that - so I rely on all of you to manage the talent to make sure that we are putting our superstars in those assignments so we can remain operationally relevant to the United States Army. And so we've always got to keep our eye on that; we've always got to keep our eyes on the core function of TRAC and CAA because institutionally the Army depends upon the work done at those analytical agencies to plot out its future. How do we do all that plus how to expand Data Science? It's just like any other Silicon Valley start-up - you grow - you retrain yourselves - you become multi-functional and we've got to think of ourselves as a band of entrepreneurs who are growing a business unit. So we grow our business unit and we grow our skills a couple of ways. Number one is VTIPs - VTIP is our life blood - bringing in new talent every single year is singularly as a functional area the most important thing we do. If you screw that up there's nothing you can do five years down the road to recover from it - you're just done. You only bring in ten people you're only going to have ten people. You bring in 30 people, but they're not the right 30 people you're done. We need a lot of help with that because every six months you're back to square one - it's like being a college football coach - you've got to bring in the next freshman class otherwise you're done. We've got to do a lot of work; I personally cold call CPTs and MG Wins cold calls CPTs - you all can go do the same thing to help us out. Because it's the admissions, the college admissions thing - we want to interest those who are qualified to be ORSAs; not qualify those who are interested. It's not my phrase, someone stole it from somebody, but that's what we're after. Who are the most talented, company grade officers in the Army that have the aptitude to do what we need to do and then we've got to go out there and sell them on becoming an ORSA - that puts them at the centerpiece and that's what I tell them - hey we're after you - and not just sit around and wait to see who puts in a VTIP form and then wade through them and see who's qualified - because when we're down to that we can put the going out of business sign up. The second thing in addition to growing our ranks, there is the constant focus on continuing education. You are all smart - we're going to have to continue to build out those skill sets in order to continue focus in all these areas. I'm going to pause there because I had Dan Shrimpton tell me I have to be out of here in another 5 to 7 minutes, so I'll take whatever questions from in the room or out the room or where ever it is .. over ...

Sir - COL Joe Burger from the Center for Army Analysis - Sir my only caution to the expansion in data science is that it is an extremely shiny object and my concern is although I agree that there's huge value in data science in that field, my concern is that everyone is going to get fixated on that and you mention about the heart and soul about what we do related to the support to the Corps and Division ORSAs - so we need to have at least a good of a plan to enhance and develop that as well as continuing to refine

our other core ORSA skills such as statistics and communicating and visualization of data as you know, yes I don't think that I'm going to be able to compete with the \$10 billion dollar savings if I do something with data science and do something with threat financing, but you know that every day the majority of us are not going to be doing that, so I caution us as a branch that we need to have just as detailed and compassionate plans for the other 70 percent of what we do is core ORSAs. Thank you Sir.

MG Ferrari: So I agree and I'll say you cannot be even a marginally adequate data scientist unless you are an expert in those things that you said, data visualization; the ability to communicate; the ability to work in teams; the ability to solve problems. Those skills are what make us the best group of people to take on the function of data science because the data science is really taking those skills and adding some data management and programming to it which is why we've been able to rapidly move into those fields. And then our ability to take those skills that we use in other places and then retrograde them into some of the other areas that are in our core function. But you are correct, we have a core function that we have to go on. What I look at as, and what I tell COLs is that LTCs who are becoming COLs one of the things leaders do is lead change. Leaders aren't necessarily needed to keep doing things well in your core functions that you're doing because institutionally we do those well. So I spend a lot of time on the data science part and talking about it, not because I think the core functions are less important, I believe that the core functions are solid, the fundamentals are strong, I spend a lot of time talking to Division and Corps Commanders to monitor that, to make sure we don't go sideways. But then that allows me time to figuring out how do we make this branch out into data sciences, but I don't view the data science piece as a separate, distinct sub-function from our core skills. It's our core skills that make us good data scientists and if we ever forget that then we will be poor data scientists.

Question: COL Jim West, ARCIC - Inaudible (What's the linkage TWI and follow on assignments)

MG Ferrari: Since we don't have a broad base of people with the skills of data sciences right now, we have to develop it. I've always wondered why we put young CPTs and MAJs into their graduate school program and why we can't tell them - hey you know two years when you graduate you're going to go work for this organization here. So while you're in school, why don't you start building a network with them, figure out what you're going to need to do with them and maybe you can orient your course of study to solve some of their problems and to learn the skills you're going to need to do that. I view TWI as a way for me to get certain senior MAJs and LTCs additional training, not education, its training. It's training for a purpose, we do not do TWI for broadening, we just don't, so what I view is why do we need the training and there's a certain assignment and I view TWI as preparatory for them to go into those assignments. It's a way to take somebody who's been out of school for a couple of years; done some other things, and say you're going to go into this type of assignment here but we need to build up your training so that you are valued added. Before you go to NETCOM, I'm going to send you for a year to Verizon and you need to see how they operate and then when you come into NETCOM, you're going to walk in and add value from day one. So I absolutely view, when I first came back I was frustrated with, hey you're going to Verizon and send you to something that doesn't use that training. So I view education and training in distinct buckets and I believe we have to do a lot more training, preparatory training for people going into certain jobs and the same way CAA runs the Deployed Analyst Course. If you go to the Deployed Analyst Course, you're going to deploy or if you're deploying we'll put you in there and if we need to do that with other functions we should do that. Somebody says we should be sending someone to some assessment training, yes I'm all in. So I want to do a lot more that, even with the youngsters, so if someone is going into a PhD program, we ought to have some idea of what they're doing afterwards. Why would be put them in that program, what is it that we want them to do and what I always hear is they get there and they are looking for a project; well if you know you are going to

this command go figure out what they've got that's broken then they can go spend two of three years figuring out how to solve. Next.

COL Winklbauer from TRAC FLVN. Sir you said the word broadening, I was wondering if you could give us your thoughts on broadening - or breadth versus depth. Think it becomes a specialist versus a jack of all trades. Somebody out there posted that question and I'll put up the idea that maybe we ought to have specialist who focus in on certain areas and then they go to these certain type of assignments. Thank you.

MG Ferrari: Yeah, so I think the answer is yes. I think as a functional area, we will have people who have a depth of knowledge in certain areas and will only work in certain areas and do certain things. We have folks going to the SOCOM world that we never really see them again and that's okay. We have folks who like to do wargaming and they go into CAA and TRAC and do those things and that's okay. But we also have folks, and I'm one of them, who have kind of bounced around, but that's okay too. Because we don't have Key Development (KD) jobs, we don't have CSL jobs, what we bill ourselves as is solving problems and helping people make decisions. I don't view you all as individuals, I view us all as one big tool box for the Army. The intel world, they don't like kind of transient people, they'll accept a couple, but they want people that have been in the intel world for a while and understand the vagaries. That's okay - that's what the customer wants, that's what we'll give them. And if we have a problem that requires that then we'll have that. But we'll also have generalist, so when FORSCOM says hey I need some ORSAs, we have many of you who understand logistics, assessments, they've been in the Divisions, they've been downrange. They're comfortable having that wide range of experiences and so I think the answer is yes, we will have some people with breadth, we will have some people with depth. The answer is do well in what you're doing and you're going to get promoted. I've sat promotion boards nobody is sitting around saying is this a breadth or a depth person. If the senior rater says above center of mass, promote this person, you're going to get promoted. If the senior rater says, ehhh, and that's about it, you probably are not getting promoted. So yes, breadth and depth. Then we'll have two of three people who will figure out how to do both. I'll take one more.

Sir, COL Britt Walker, from Fort Belvoir. You said the health of the functional area is very good and one of the criteria you used to measure that was the demand. The demand for the ORSA skill set. Is demand so high that you envision a time when the functional area will grow or are we about the right size? Thanks Sir.

MG Ferrari: I'm of the school of grow or die. You can ask Cardy Moten, it's how do I get MORE! I have never said no to growth. You're either growing or you're not growing. Those are the two states of being for an organization. But you can only grow at a pace that you can sustain and our sustainment is all about our VTIP and bringing in talented people. I won't grow at the expense of the quality. One way to meet demand would be to cut back on training, I could cut back on TWI, cut back on ACS, and then we can have more people to assign. But that buys you two or three years and then you're on a death spiral. The answer for us is to get bigger and stronger, bring in more people, do more training so we can solve more of the Army's problems. I believe, down to my bones, that if I can get more ORSAs into more corners of the Army we can fix more problems for the Army. NETCOM needs a lot of ORSAs and so we're going to build an ORSA cell for them and there's lots of places in HQDA, and there's lots of other places that could use the skill sets and the help. I'm pushing for more, more and more growth, the only thing that would slow us down are two things: (1) our inability to get new people in and then, (b) we

start dropping the ball and then the Commander's out there go ehhh, they weren't that good so thanks, I don't need them. But I'll tell you, I personally talk to all the Division Commander's, especially as we get to the summer where we are swapping out ORSAs. I talk to them all to help that ORSA transition. I talk to the Corps Commanders, I talk to the COCOMs that I know and we always talk. I just had the new CENTCOM J8 come in. I said hey when you get down to Tampa you've got some ORSAs and here's what you're doing and they go okay, I've got my ORSAs. So we're going to continue to grow because I think that we are a great return on investment for the Nation, our Army and our soldiers. That's what I'm after.

Okay, I'm going to turn it back over to Dan - we put out a fairly lengthy stats of the functional area in Jun 2017 if you haven't read it, get a copy of it. Number two, Read, Read and Read. Read things in your field, read things out of your field, I think that when we sent that note out we put a reading list on it and it's a broad, breadth of reading of how Washington works, to how insurgency works, to how you run a start-up organization, because if you're an island ORSA in this small group, you're nothing but a Silicon valley start-up trying to figure out how to solve problems. Everybody's busy, but when you stop reading and you stop training you will stop being value added and then we just need to bring somebody else in, when you lose that intellectual curiosity - that's okay - we all hit that point - just step aside and let someone else in who's curious and wants to learn. Nothing wrong with that. Thanks for what you're doing, to the COLs, listen - you all run the functional area, you've got to come together and you've got to work to do that. To the MAJs and LTCs, this is your future, you can sit around and say hey they should do this and they should do that, in whatever time I've got left, I'm not the future of this place, I'm just doing the best that I can with what limited time that I've got. You all are going to be in this place for ten years, fifteen, this is your functional area, this is your life for the next ten or fifteen years, five years, whatever it is. So start steering and start contributing, there's nobody going to do this stuff for us - but us. Thanks for the time and I yield the floor back to COL Shrimpton